



January 29, 2013

Sent via email

David Duster
U.S. Environmental Protection Agency
Region 8, 8ENF-T
999 18th Street, Suite 300
Denver, Colorado 80202-2466

RE: Apex Inspection Reports – August 2012 thru December 2012

Dear David:

Attached are inspection reports for August 2012 thru December 2012.

Sincerely,

A handwritten signature in black ink, appearing to read "P. Glader", with a stylized, flowing script.

Paul L. Glader
Manager Environmental Services

Encl

Annual Site Inspection Summary Sheet - Apex Site - Pond 2

Hecia Mining Company - Long-Term Maintenance and Monitoring Plan

Form 1 of 4 - Summary

Date: <u>8-8-12</u>			
Inspector: <u>D. Kuma</u>			
Cover System Component	Potential Problem	Allowable Limits	Limits Potentially Exceeded
Site Perimeter	Erosion or Fencing Issues	NA	NA
Cover System (outslopes, top, rock)	Subsidence	Minor: ponding < 1" some gullying / erosion	Yes ___ * No <input checked="" type="checkbox"/>
		Significant: see Table 2	Yes ___ * No <input checked="" type="checkbox"/>
	Embankment Slope Stability	excessive movement or surface cracks > than 1"	Yes ___ * No <input checked="" type="checkbox"/>
	Gullying	on top	depth > 1" Yes ___ * No <input checked="" type="checkbox"/>
		at embankment crest or on outslope	depth > 2" Yes ___ * No <input checked="" type="checkbox"/>
		w/in normal flow channel in diversion channel	no gullying allowed Yes ___ * No <input checked="" type="checkbox"/>
		w/in diversions at toe of impoundment outslope	no gullying allowed Yes ___ * No <input checked="" type="checkbox"/>
		in diversion channel at any other location	NA NA
	Erosion Protection Stability	rock subsiding or missing	Yes ___ * No <input checked="" type="checkbox"/>
	Seepage	no colored seepage allowed (red, blue, yellow w/ crystallization)	Yes ___ * No <input checked="" type="checkbox"/>
Runoff Control System	Diversion Channel	rock in place, channel not moving, fence stable	Yes <input checked="" type="checkbox"/> * No ___
	Diversion Swales	rock in place, no silting in or head cutting	Yes <input checked="" type="checkbox"/> * No ___
	Excessive silt build up at fence lines in diversion channel	allowed if not effecting cover system	Yes ___ * No <input checked="" type="checkbox"/>

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 2 of 4 - Site Perimeter

Inspection Date: <u>8-8-12</u>	
Inspector: <u>D. Trumel</u>	
Visible Outlying Areas	
Observed Condition:	<u>No New problems</u>
Observed Damage:	<u>None</u>
May require repair: Yes ___ * No <input checked="" type="checkbox"/>	
Property Boundary Fence and Gate (walk fence line)	
Observed Condition:	<u>Fence & Gate in good Condition</u>
Observed Damage:	<u>No problem</u>
Potential Corrective Actions:	<u>None</u>
May require repair: Yes ___ * No <input checked="" type="checkbox"/>	
All Upgradient Areas (areas that drain onto property)	
Observed Condition:	<u>No Change</u>
Observed Damage:	<u>None</u>
May require repair: Yes ___ * No <input checked="" type="checkbox"/>	

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 3 of 4 - Impoundment

Inspection Date: <u>8-8-12</u> Inspector: <u>D. Tamm</u>			
Outslopes			
Observed Performance:	Rock Cover Subsidence:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Excessive Slope Movement (failure):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Gully Development:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Observable Leachate (colored):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Excessive Siltation (at slope toe):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			
Top (top surface soils)			
Observed Performance:	Cracking (>1" width):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Settlement / Evidence of Ponding:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Erosion / Gullyng:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			
Erosion Protection Layer (rock)			
Observed Performance:	Rock Staying in Place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Rock Subsiding:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Missing Rock:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 4 of 4 - Diversion Channel and Swales

Date: <u>8-8-12</u>			
Inspector: <u>D. Thomas</u>			
Diversion Channel			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Normal Flow Channel in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Encroaching on Site Fencing:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			
Diversion Swales			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Flow Channel Silting In:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Head Cutting:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection Summary Sheet - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 1 of 4 - Summary

Date: <u>9-23-12</u>			
Inspector: <u>D. Tramm</u>			
Cover System Component	Potential Problem		Limits Potentially Exceeded
Site Perimeter	Erosion or Fencing Issues		NA
Cover System (outslopes, top, rock)	Subsidence		Minor: ponding < 1" some gullying / erosion Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>
			Significant: see Table 2 Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Embankment Slope Stability		excessive movement or surface cracks > than 1" Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Gullying	on top	depth > 1" Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		at embankment crest or on outslope	depth > 2" Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		w/in normal flow channel in diversion channel	no gullying allowed Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		w/in diversions at toe of impoundment outslope	no gullying allowed Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		in diversion channel at any other location	NA NA
	Erosion Protection Stability		rock subsiding or missing Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Seepage		no colored seepage allowed (red, blue, yellow w/ crystallization) Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Runoff Control System	Diversion Channel		rock in place, channel not moving, fence stable Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>
	Diversion Swales		rock in place, no silting in or head cutting Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>
	Excessive silt build up at fence lines in diversion channel		allowed if not effecting cover system Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 2 of 4 - Site Perimeter

Inspection Date: <u>9-23-12</u>	
Inspector: <u>D. [Signature]</u>	
Visible Outlying Areas	
Observed Condition:	<u>All is well</u>
Observed Damage:	<u>None</u>
May require repair: Yes ___ * No <input checked="" type="checkbox"/>	
Property Boundary Fence and Gate (walk fence line)	
Observed Condition:	<u>Fence & Gate are fine</u>
Observed Damage:	<u>None</u>
Potential Corrective Actions:	<u>None</u>
May require repair: Yes ___ * No <input checked="" type="checkbox"/>	
All Upgradient Areas (areas that drain onto property)	
Observed Condition:	<u>No Change</u>
Observed Damage:	<u>None</u>
May require repair: Yes ___ * No <input checked="" type="checkbox"/>	

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 3 of 4 - Impoundment

Inspection Date: <u>9-23-12</u> Inspector: <u>D. R. [Signature]</u>			
Outslopes			
Observed Performance:	Rock Cover Subsidence:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Excessive Slope Movement (failure):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Gully Development:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Observable Leachate (colored):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Excessive Siltation (at slope toe):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NO change</u>			
Potential Corrective Actions: <u>NONE</u>			
Top (top surface soils)			
Observed Performance:	Cracking (>1" width):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Settlement / Evidence of Ponding:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Erosion / Gullyng:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NO change</u>			
Potential Corrective Actions: <u>NONE</u>			
Erosion Protection Layer (rock)			
Observed Performance:	Rock Staying in Place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Rock Subsiding:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Missing Rock:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 4 of 4 - Diversion Channel and Swales

Date: <u>9-25-12</u>			
Inspector: <u>D. Ru</u>			
Diversion Channel			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Normal Flow Channel in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Encroaching on Site Fencing:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>None</u>			
Potential Corrective Actions: <u>None</u>			
Diversion Swales			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Flow Channel Silting In:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Head Cutting:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>No change</u>			
Potential Corrective Actions: <u>None</u>			

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection Summary Sheet - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 1 of 4 - Summary

Date: <u>10/13/12</u>			
Inspector: <u>D. [Signature]</u>			
Cover System Component	Potential Problem	Allowable Limits	Limits Potentially Exceeded
Site Perimeter	Erosion or Fencing Issues	NA	NA
Cover System (outslopes, top, rock)	Subsidence	Minor: ponding < 1" some gulying / erosion	Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>
		Significant: see Table 2	Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Embankment Slope Stability	excessive movement or surface cracks > than 1"	Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Gulying	on top	depth > 1" Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		at embankment crest or on outslope	depth > 2" Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		w/in normal flow channel in diversion channel	no gulying allowed Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		w/in diversions at toe of impoundment outslope	no gulying allowed Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		in diversion channel at any other location	NA NA
	Erosion Protection Stability	rock subsiding or missing	Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Seepage	no colored seepage allowed (red, blue, yellow w/ crystallization)	Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Runoff Control System	Diversion Channel	rock in place, channel not moving, fence stable	Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>
	Diversion Swales	rock in place, no silting in or head cutting	Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>
	Excessive silt build up at fence lines in diversion channel	allowed if not effecting cover system	Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 2 of 4 - Site Perimeter

Inspection Date: <u>10/13/12</u>	
Inspector: <u>D. Trueman</u>	
Visible Outlying Areas	
Observed Condition:	<u>Things looked Fine</u>
Observed Damage:	<u>NONE</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
Property Boundary Fence and Gate (walk fence line)	
Observed Condition:	<u>No New Problems</u>
Observed Damage:	<u>NONE</u>
Potential Corrective Actions:	<u>NONE</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
All Upgradient Areas (areas that drain onto property)	
Observed Condition:	<u>No Change</u>
Observed Damage:	<u>NONE</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 3 of 4 - Impoundment

Inspection Date: <u>10/13/14</u> Inspector: <u>D. Drew</u>			
Outslopes			
Observed Performance:	Rock Cover Subsidence: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Excessive Slope Movement (failure): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Gully Development: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Observable Leachate (colored): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Excessive Siltation (at slope toe): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			
Top (top surface soils)			
Observed Performance:	Cracking (>1" width): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Settlement / Evidence of Ponding: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Erosion / Gullyng: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			
Erosion Protection Layer (rock)			
Observed Performance:	Rock Staying in Place: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Rock Subsiding: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Missing Rock: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 4 of 4 - Diversion Channel and Swales

Date: <u>10/13/12</u> Inspector: <u>D. [Signature]</u>			
Diversion Channel			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Normal Flow Channel in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Encroaching on Site Fencing:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NO Change</u>			
Potential Corrective Actions: <u>None None</u>			
Diversion Swales			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Flow Channel Silting In:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Head Cutting:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NO - Change</u>			
Potential Corrective Actions: <u>None</u>			

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection Summary Sheet - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 1 of 4 - Summary

Date: <u>11/22/12</u>				
Inspector: <u>D. Trueman</u>				
Cover System Component	Potential Problem	Allowable Limits	Limits Potentially Exceeded	
Site Perimeter	Erosion or Fencing Issues	NA	NA	
Cover System (outslopes, top, rock)	Subsidence	Minor: ponding < 1" some gulying / erosion	Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>	
		Significant: see Table 2	Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Embankment Slope Stability	excessive movement or surface cracks > than 1"	Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Gulying	on top	depth > 1"	Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		at embankment crest or on outslope	depth > 2"	Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		w/in normal flow channel in diversion channel	no gulying allowed	Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		w/in diversions at toe of impoundment outslope	no gulying allowed	Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		in diversion channel at any other location	NA	NA
	Erosion Protection Stability	rock subsiding or missing	Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Seepage	no colored seepage allowed (red, blue, yellow w/ crystallization)	Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
Runoff Control System	Diversion Channel	rock in place, channel not moving, fence stable	Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>	
	Diversion Swales	rock in place, no silting in or head cutting	Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>	
	Excessive silt build up at fence lines in diversion channel	allowed if not effecting cover system	Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 2 of 4 - Site Perimeter

Inspection Date: <u>11/22/12</u>	
Inspector: <u>D. Penner</u>	
Visible Outlying Areas	
Observed Condition:	<u>No problem.</u>
Observed Damage:	<u>None</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
Property Boundary Fence and Gate (walk fence line)	
Observed Condition:	<u>No Change</u>
Observed Damage:	<u>None</u>
Potential Corrective Actions:	<u>None</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
All Upgradient Areas (areas that drain onto property)	
Observed Condition:	<u>No Change</u>
Observed Damage:	<u>None</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 3 of 4 - Impoundment

Inspection Date: <u>11/23/14</u> Inspector: <u>D. J. [Signature]</u>			
Outslopes			
Observed Performance:	Rock Cover Subsidence:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Excessive Slope Movement (failure):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Gully Development:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Observable Leachate (colored):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Excessive Siltation (at slope toe):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NO Change</u>			
Potential Corrective Actions: <u>NONE</u>			
Top (top surface soils)			
Observed Performance:	Cracking (>1" width):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Settlement / Evidence of Ponding:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Erosion / Gullyng:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			
Erosion Protection Layer (rock)			
Observed Performance:	Rock Staying in Place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Rock Subsiding:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Missing Rock:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 4 of 4 - Diversion Channel and Swales

Date: <u>11/23/14</u> Inspector: <u>D. [Signature]</u>			
Diversion Channel			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Normal Flow Channel in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Encroaching on Site Fencing:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>No problem</u>			
Potential Corrective Actions: <u>None</u>			
Diversion Swales			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Flow Channel Silting In:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Head Cutting:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>No problem</u>			
Potential Corrective Actions: <u>None</u>			

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection Summary Sheet - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 1 of 4 - Summary

Date: <u>12/22/12</u>			
Inspector: <u>D. Turner</u>			
Cover System Component	Potential Problem		Limits Potentially Exceeded
Site Perimeter	Erosion or Fencing Issues		NA
Cover System (outslopes, top, rock)	Subsidence		Minor: ponding < 1" some gullying / erosion Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>
			Significant: see Table 2 Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Embankment Slope Stability		excessive movement or surface cracks > than 1" Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Gullying	on top	depth > 1" Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		at embankment crest or on outslope	depth > 2" Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		w/in normal flow channel in diversion channel	no gullying allowed Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		w/in diversions at toe of impoundment outslope	no gullying allowed Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
		in diversion channel at any other location	NA NA
	Erosion Protection Stability		rock subsiding or missing Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Seepage		no colored seepage allowed (red, blue, yellow w/ crystallization) Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Runoff Control System	Diversion Channel		rock in place, channel not moving, fence stable Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>
	Diversion Swales		rock in place, no silting in or head cutting Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>
	Excessive silt build up at fence lines in diversion channel		allowed if not effecting cover system Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 2 of 4 - Site Perimeter

Inspection Date: <u>12/22/12</u>	
Inspector: <u>D. Tramm</u>	
Visible Outlying Areas	
Observed Condition:	<u>No New problems.</u>
Observed Damage:	<u>None</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
Property Boundary Fence and Gate (walk fence line)	
Observed Condition:	<u>Fence & gate are in good repair</u>
Observed Damage:	<u>None</u>
Potential Corrective Actions:	<u>None</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
All Upgradient Areas (areas that drain onto property)	
Observed Condition:	<u>No change</u>
Observed Damage:	<u>None</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 3 of 4 - Impoundment

Inspection Date: <u>10/22/12</u> Inspector: <u>D. [Signature]</u>			
Outslopes			
Observed Performance:	Rock Cover Subsidence: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Excessive Slope Movement (failure): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Gully Development: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Observable Leachate (colored): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Excessive Siltation (at slope toe): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
Observed Damage: <u>NO change</u>			
Potential Corrective Actions: <u>NONE</u>			
Top (top surface soils)			
Observed Performance:	Cracking (>1" width): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Settlement / Evidence of Ponding: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Erosion / Gullyng: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
Observed Damage: <u>NO problem</u>			
Potential Corrective Actions: <u>NONE</u>			
Erosion Protection Layer (rock)			
Observed Performance:	Rock Staying in Place: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Rock Subsiding: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
	Missing Rock: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 4 of 4 - Diversion Channel and Swales

Date: <u>12/22/12</u> Inspector: <u>D. R. [Signature]</u>			
Diversion Channel			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Normal Flow Channel in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Encroaching on Site Fencing:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage:	<u>No change</u>		
Potential Corrective Actions:	<u>None</u>		
Diversion Swales			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Flow Channel Silting In:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Head Cutting:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage:	<u>No problems</u>		
Potential Corrective Actions:	<u>None</u>		

* Mark all areas of concern or requiring repairs on attached site map.